

REMARKS

Claims 1-9, 12, 14-18 and 21-23 are pending in the present application. Claims 14 and 16 are amended herein. Claims 10-11, 13, 19-20 and 24-32 have been cancelled.

Election/Restrictions

Applicants note the finality of the restriction of the claims by the Examiner. Applicants respectfully reserve the right to file one or more divisional applications directed to non-elected subject matter. Applicants further request that the election of species be expanded to encompass the non-elected species once the elected species are deemed allowable over the prior art.

Objections to the claims

Claims 14 and 16 have been objected for lacking antecedent basis for the term “filtration”. Claim 14 has been amended to replace “prior to filtration” with “prior to permeating through said membrane” and claims 16 has been amended to replace “filtration” with “permeation”. Withdrawal of the objection is, therefore, respectfully requested.

Rejections under 35 USC § 103

Claims 1-2, 12, and 14-18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawata et al. ‘113 (US 6,696,113). Applicants traverse this rejection and withdrawal thereof is respectfully requested.

Kawata et al. ‘113 disclose a method of producing gold nano-rods by (i) preparing porous alumina by anodizing aluminum, (ii) precipitating a trace amount of copper in the pores to accelerate precipitation of gold, (iii) precipitating gold, and (iv) separating the gold rods from the alumina film by dissolving the alumina film. Kawata et al. ‘113 also teach that the “copper can be selectively dissolved to facilitate separation of gold from [*sic*, from] the film” (col. 16, lines 25-26). In addition, the reference discloses that “[v]arious metals can be deposited or charged into the pores on an alumina layer according to an electrochemical method. The alumina layer is then selectively dissolved and removed from the metal to form rod-like grains of a micro or nano order” (col. 10, lines 12-16).

Kawata et al. '113 is silent on the interactions between the copper traces, the gold precipitate and the porous alumina material itself. The mechanism of precipitation acceleration of gold is undefined in the reference. For instance, it is not clear whether the presence of copper induces changes (electrostatic, geometric, etc.) in the alumina that induces the gold to precipitate. Furthermore, it is not clear where exactly the gold precipitates. Thus, Kawata et al. '113 does not teach the deposition process claimed in the present invention.

Kawata et al. '113 only teaches that metals initially dissolved in solution can be deposited by electroless deposition into the alumina pores. The process disclosed in Kawata et al. '113 is achieved on a membrane that is the outer surface of an impermeable whole (the aluminum bulk "under" the etched zone is not porous) and relies on diffusional processes at a molecular level. In contrast, in the present application, the entire membrane must be porous and the flow of solution through that membrane is critical to the claimed invention.

Kawata et al. '113 fail to teach or suggest each and every limitation of the present invention. The present invention, as recited in claim 1, recites "a coating material which can bind to exposed surfaces of said microparticles, and which can permeate through the pores of said membrane." Kawata et al. '113 do not disclose that the gold *binds* to the copper. To the contrary, Kawata et al. '113 suggest using only a trace amount of copper to accelerate precipitation of gold and then dissolving the copper to facilitate the separation of gold from the film.

As the Examiner admits, Kawata et al. '113 do not specifically disclose the permeation of the coating material through the pores of the membrane or that the coating material flows relative to the microparticles. In fact, the cited reference teaches that metals can be *deposited or charged* into the pores. This teaching is a substantial distinction from the limitation of claim 1 that the "coating material...can permeate through the pores of said membrane." As such, the instantly claimed invention is neither disclosed nor suggested by the teachings of Kawata et al. '113 and withdrawal of the rejection is respectfully requested.

Claims 3-9 have been rejected under 35 U.S.C. §103 as being unpatentable over Kawata et al. '113 as applied to claims 1-2 and further in view of Petit et al. Claims 22-23 have been rejected under 35 U.S.C. §103 as being unpatentable over Kawata et al. '113 as applied to claim 1

and further in view of Takei et al. Claim 21 has been rejected under 35 U.S.C.§103 as being unpatentable over Kawata et al. '113 as applied to claim 17 and further in view of Fain et al. '255 (US 6,649,255). Applicants traverse these rejections and withdrawal thereof is respectfully requested. All of the present rejections are premised on the erroneous interpretation of Kawata et al. '113, which are discussed above. The secondary references of Petit et al., Takei et al. and Fain et al. fail to teach the deficiencies present in Kawata et al. '113. As such, the subject matter of claims 3-9, and 21-23, is further not obvious over the cited references and withdrawal of the rejections is respectfully requested.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact MaryAnne Armstrong, Ph.D., Reg. No. 40,069 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

Dated: JUL 22 2008

Respectfully submitted,

By 

MaryAnne Armstrong, Ph.D.

Registration No.: 40,069

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant